**Thinking with Mathematical Models**

*1.) Recognize linear and non-linear patterns in tables and graphs.*

*2.) Write linear equations to express patterns appearing in tables, graphs, and problems.*

*3.) Move flexibly among tables, graphs, equations, and words (problems).*

*4.) Use linear and non-linear relationships to make predictions and decisions.*

**Say It With Symbols**

*5.) Solve linear and quadratic\* equations.*

*6.) Simplify algebraic expressions.*

**Shapes of Algebra**

*7. Graph and solve linear inequalities.*

*8. Solve systems of equations graphically and symbolically.*

*9. Determine if lines are parallel or perpendicular by comparing slopes.*

**Looking For Pythagoras**

*10.) Estimate the values of square roots and locate them on a number line.*

*11.) Use Pythagorean Theorem to find missing lengths in problem solving.*

**Samples and Populations**

*12.) Construct and analyze displays of data including box-and-whisker and stem-and-leaf plots.*

*13.) Display and use Measures of Central Tendency such as mode, median, and mean.*

**CSAP Review ELG Unit**

*A.) Calculate scale factor and use it to find missing side lengths in similar figures (7th).*

*B.) Order positive and negative rational (fractions and decimals) numbers (7th).*

*C.) Find area of polygons (square, rectangle, triangle, parallelogram, rhombus) (6th).*

*D.) Calculate surface area of a rectangular prism, ~~rectangular prism,~~ and cylinder (7th).*

*E.) Calculate volume of a rectangular prism, ~~triangular prism,~~ and cylinder (7th).*

*F.) Calculate theoretical and experimental probability with one and two stage events (7th).*

**Growing, Growing, Growing**

*14.) Identify situations in which a quantity grows or decays exponentially.*

*15.) Move flexibly among tables, graphs, equations, and words for exponential relationships.*

*16.) Understand and apply the rules for working with exponents.*

**Frogs, Fleas, and Painted Cubes**

*17.) Identify quadratic patterns in tables, graphs, and equations.*

*18.) Move flexibly among tables, graphs, equations, and words for quadratic relationships.*

*19.) Use quadratic relationships to make predictions or solve problems.*

*20.) Write equivalent expressions in factored and expanded forms by using the distributive property.*